PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/538,148

Filed: June 8, 2005

Inventor: Jun Yoshida et al

For: Method For Machining Workpiece

Atty. Doc. No.: 193-05

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Post Office as first class mail postage prepaid in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 11, 2005

John F. McNulty
23,028

COVER LETTER WITH CERTIFICATE OF MAILING

Mail Stop Amendment
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed herewith are the following:

(1) Cover Letter with Certificate of Mailing;
(2) International Search Report;
(3) Information Disclosure Statement with attachments;
(4) PTO Form 1449;
(4) Paul & Paul Postcard to be returned by the PTO.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES ASSOCIATED WITH THIS COMMUNICATION, OR CREDIT ANY OVERPAYMENT, TO PAUL & PAUL DEPOSIT ACCOUNT NO. 16-0750, ORDER NO. 3384

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In the interest of full disclosure, the following items are herewith identified in Form PTO-1449 and a copy of the same is hereby provided, for the convenience of the U.S. Patent and Trademark Office.

This Information Disclosure Statement is being filed before the mailing date of the first official action.

FOREIGN PATENTS

(AA) JP-A-188252, published July 27, 1989. Relevance is cited in category X and Y in the International Search Report and relevant to claims 1, 3, 10, 2, 4-19, 11-13 (attached hereto).

The reference describes the steps of measuring the length of the tool after completion of grinding; comparing the measured length of the tool with the original length of the tool stored in the memory to compute the decreased length of the tool; amending the set position of the tool by the decreased length; and moving the tool back to the location where the machining had been interrupted to restart the machining. Thus, if the set position of the tool is amended by the decreased length, the tool edge position relative to

the workpiece will become the same as that of the original non-worn tool. Therefore, when the machining restarts at the location where the machining had been interrupted, the level difference will be generated as shown in Fig. 5 of the present application. In other words, the reference does not disclose the present invention feature of "setting the tool edge position of the working tool upon the restart of the machining operation for the workpiece to coincide with the tool edge position of the working tool upon the interruption of the machining operation for the workpiece, based on the detected wear amount of the working tool, and restarting the machining operation for the workpiece from the set tool edge position of the working tool".

(AB) JP-A-6-143093, published May 24, 1994. Relevance is cited in category Y in the International Search Report and relevant to claims 2, 4-9, 11-13 (attached hereto).

The reference describes the technique of measuring the operating time of the tool to estimate the wear amount of the tool. However, the reference does not describe the present invention feature of correcting the tool edge position of the working wool so as to compensate for the estimated wear amount of the working tool. Further, the reference does not describe the present invention feature of "setting the tool edge position of the working tool upon the restart of the machinihng operation for the workpiece to coincide with the tool edge position of the working tool upon the interruption of the machining operation for the workpiece, based on the detected wear amount of the working workiece from the set tool edge position of the working tool".

(AC) JP-A-2-59253, published February 28, 1990. Relevance is cited in category Y in the International Search Report and relevant to claims 9, 13 (attached hereto).

The reference describes the fact that the wear amount per unit cutting length changes depending on the condition. However, the reference does not describe the present invention feature of using the wear amount to compensate for the tool wear. Further, the reference does not describe the present invention feature of "setting the tool edge position of the working tool upon the restart of the machining operation for the workpiece to

coincide with the tool edge position of the working tool upon the interruption of the machining operation for the workpiece, based on the detected wear amount of the working tool, and restarting the machining operation for the workpiece from the set tool edge position of the working tool".

Respectfully submitted,

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INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
193-05	10/538,148
Applicant(s)	
Jun Yoshida et al	
Filing Date	**Group Art Unit**
June 8, 2005	N/A

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	Translation NO
	AA	JP-A-188252	07/27/1989	Japan				
	AB	JP-A-6-143093	05/24/1994	Japan				
	AC	JP-A-2-59253	02/28/1990	Japan				

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.